



Evidence of Past Impact

NEED curriculum is used in thousands of classrooms across the nation. Every program and training NEED delivers includes a variety of program evaluation metrics to gather evidence of impact.

EVALUATION SURVEY

Teachers complete evaluations at local energy workshops and at all training events. Longitudinal evaluations are completed three months and one year after a teacher is introduced to NEED and continue after that to determine maximum impact and efficiency of NEED programming. The surveys collect data in both quantitative and qualitative form. Educators are asked about program usability, success, obstacles, applicability, and adaptations needed. NEED compares evaluation data to previous year's feedback to make any necessary adaptations for improvement.

Notable Evaluation Comments:

"The materials from this workshop (both printed materials and resources for hands-on activities) are the best I have ever received in any professional development workshop! While I teach science, the workshop gave me lots of ideas for cross-curricular efforts. I will be partnering with my CTE colleagues, as well as social sciences, language arts, and creative arts." – 9-12 th grade teacher (1/29/21)

"The curriculum is teacher-friendly. Non-Science teachers can easily follow the hands-on activities and explain the scientific principles behind the results because of the teacher-friendly and student-friendly explanations that are provided at the end of each activity." – 6 th grade teacher (3/6/21)

"The materials provide opportunities for students to make personal connections with current events in

energy rather than just learning them as static facts.” – 10-12 th grade teacher (2/10/21)

2020 Workshop Specific Year-End Data:

- 1,295 evaluation responses from both virtual and in-person energy workshops
- 99% recommend NEED materials
- 99% recommend attending a NEED workshop
- At least 244,123 students expected to be reached utilizing NEED materials and curriculum
- 54% of participants had never participated in a prior energy training program, virtual or otherwise

2019-2020 Energizing Student Potential – [IL Program Evaluation 2020-2021 NEED Virtual Workshop Follow-Up Survey- Rhode Island Workshop Data](#)

PRE/POST TEST

The online Pre/Post Energy Poll provides educators with a tool to assess student knowledge of energy, and NEED uses the data to determine areas of needed improvement in the curriculum and training. Teachers and students participate in pre- and post-knowledge assessments during training workshops and in the classroom. In 2019, NEED conducted a total of 107 pre/post tests, reflecting an average of 94% increase in knowledge gain. For 2020, NEED conducted 69 pre/post tests with an average of 74% increase in knowledge gain.

Example Post-Test

STUDENT FEEDBACK

Polls can be used to assess students’ basic energy knowledge, as well as their opinions about energy before and after the classroom energy unit. NEED polled 3,237 students in grades 3-8 who participated in a 2019 Energizing Student Potential Program using NEED curriculum and activities. 81% of students agreed they learned more about energy by participating in the program and understand that their personal choices at home and at school can impact others.

Elementary Energy Poll Example

Energizing Student Potential – [Student Survey](#)

TEACHER ADVISORY BOARD

NEED's Teacher Advisory Board review NEED materials for scientific accuracy, comprehensiveness, objectivity, educational soundness, and effectiveness. With annual updates as a core principle of NEED's work, teacher feedback is immediately evaluated, and alterations and course corrections are made if needed each year.

[NEED Teacher Advisory Board Members](#)

EXECUTIVE SUMMARIES – Showcasing Program Highlights

[2018-2019 Energizing Student Potential Program](#)

[2019-2020 PECO Energizing Education Program](#)

In gathering evidence of the effectiveness of our professional learning, NEED looks to all five of Thomas R. Guskey's levels of data. Level 1 being participants' reactions, NEED provides a survey at the end of a program or activity that includes rating-scale items as well as open-ended responses to garner detailed feedback and personalized comments. Level 2 reflects participants' learning. NEED provides pre- and post-testing and analyzes this data to serve as a basis for any adaptations needed to facilitation of instruction, as well as to NEED's content and format. Additionally, hands-on demonstrations and simulations to assess knowledge and skills of participants. Level 3 is organizational support and change. NEED utilizes follow-up meetings, questionnaires, and keeps in touch with participants to ensure support and understanding of the program and NEED curriculum. Level 4 is participants' use of new knowledge and skills. Many of NEED's programs have teachers and students put together a final project or portfolio of work to showcase all of their hard work and demonstrate their learning. Longitudinal surveys are sent post-workshop, as well as every few years. Level 5 is student learning outcomes. Educators are asked to provide student polls, questionnaires, and/or survey's for students that contain both knowledge assessment, rating, open-ended questions, and feedback.